

CLAIMS

What is Claimed is:

- 5 1. A process for primer coating fiber-reinforced plastics substrates which comprises the steps of (1) applying a primer layer onto a fiber-reinforced plastics substrate and (2) curing the applied primer layer, wherein the primer layer is formed from a coating composition which comprises a binder system with free-radically polymerizable olefinic
10 double bonds and with hydrolyzable alkoxysilane groups, wherein the resin solids of the coating composition exhibit a C=C double bond equivalent weight of 200 to 2000 and a content of silicon bound in alkoxysilane groups of 1 to 10 wt-% and wherein curing of the primer layer
15 proceeds by free-radical polymerization of the C=C double bonds on irradiation with high energy radiation and by the formation of siloxane bridges under the action of moisture.
2. A process according to claim 1, wherein the resin solids of the coating composition have a C=C double bond equivalent weight of 300 to
20 1500 and a content of silicon bound in alkoxysilane groups of 1 to 7 wt-%.
3. A process according to claim 1, wherein the alkoxysilane groups comprise trialkoxysilane groups.
- 25 4. A process according to claim 1, wherein the binder system with free-radically polymerizable olefinic double bonds and with hydrolyzable alkoxysilane groups additionally comprises hydroxyl groups.
- 30 5. A process according to claim 1, wherein the coating composition used to form the primer layer contains constituents which provide electrical conductivity.

6. A process according to claim 1, wherein UV radiation is used as the high energy radiation.
7. A process according to claim 1, wherein the fiber-reinforced plastics
5 substrates comprise automotive parts.
8. A process according to claim 1, wherein, after the primer layer is cured, a coating is applied selected from the group consisting of a single layer top coat and a multilayer coating.
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9. Fiber-reinforced plastics substrates coated according to the process of claim 1.